

LMP 902-903 series Filter element according to DIN 24550

Maximum working pressure up to 2 MPa (20 bar) - Flow rate up to 3000 I/min





LMP 902-903 general information

Filter element according to DIN 24550

Description

Low & Medium Pressure filters

Maximum working pressure up to 2 MPa (20 bar) Flow rate up to 3000 l/min

LMP902 and LMP903 are ranges of low pressure filter with large filtration surface mainly suitable for lubrication, off-line filtration of the reservoirs and filtration equipment.

Multiple LMP950 filters are connected to a manifold to reduce the pressure drop caused by the filter media and to increase the life time of the filter element.

They are directly connected to the lines of the system through the hydraulic fittings.

Available features:

- 4" flanged connections, for a maximum flow rate of 3000 I/min
- Filter element designed in accordance with DIN 24550 regulation
- Fine filtration rating, to get a good cleanliness level into the system
- Water removal elements, to remove the free water from the hydraulic fluid. For further information, see the Contamination Management document and the dedicate leaflet.
- Bypass valve, to relieve excessive pressure drop across the filter media
- Vent ports, to avoid air trapped into the filter going into the system
- Drain ports, to remove the fluid from the housing prior the maintenance work
- Visual, electrical and electronic differential clogging indicators

Common applications:

- Off-line filtration of reservoirs
- Filtration systems

Technical data

Filter housing materials

- Head: Anodized Aluminium
- Housing: Anodized Aluminium
- Manifolds: Welded Phosphatized Steel
- Bypass valve: Steel
- Size 1000 filter elements complying with DIN 24550 standard

Pressure

- Test pressure: 3.5 MPa (35 bar)

Bypass valve

- Opening pressure 350 kPa (3.5 bar) ±10%
- Other opening pressures on request.

Number of filter elements

LMP 902: 4 filter elements CU900 LMP 903: 6 filter elements CU900

Filter elements

Filter element according to DIN 24550 Size: 1000

∆p element type

- Microfibre filter elements series N: 20 bar
- Fluid flow through the filter element from OUT to IN

Connections LMP 902-903: In-line Inlet/Outlet

Seals

- Standard NBR series A
- Optional FPM series V

Temperature From -25 °C to +110 °C

Note LMP 902 - 903 filters are provided for vertical mounting



Weights [kg] and volumes [dm³]

Filter series	Weights [kg]	Volumes [dm ³]				
	Length 2	Length 2				
LMP 902	89.6	58				
LMP 903	129.2	87				

Filter element according to DIN 24550

FILTER ASSEMBLY SIZING Flow rates [I/min]

		Filter element design - N Series							
Filter series	Length	A03	A06	A10	A16	A25	M25 M60 M90 M250		
LMP 902	2	2217	2576	3241	3282	3506	3987		
LMP 903	2	2838	3170	3720	3755	3926	4278		

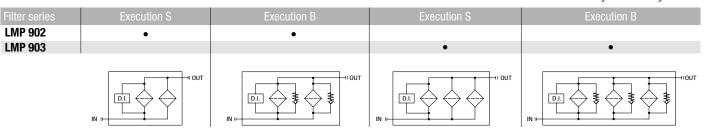
Maximum flow rate for a complete low and medium pressure filter with a pressure drop $\Delta p = 0.7$ bar.

The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.

For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.

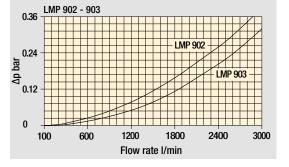
You can also calculate the right size using the formulas present on the FILTER SIZING paragraph at the beginning of the full catalogue or at the beginning of the filter family brochure. Please, contact our Sales Department for further additional information.

Hydraulic symbols



Pressure drop Filter housings Δp pressure drop

Bypass valve pressure drop



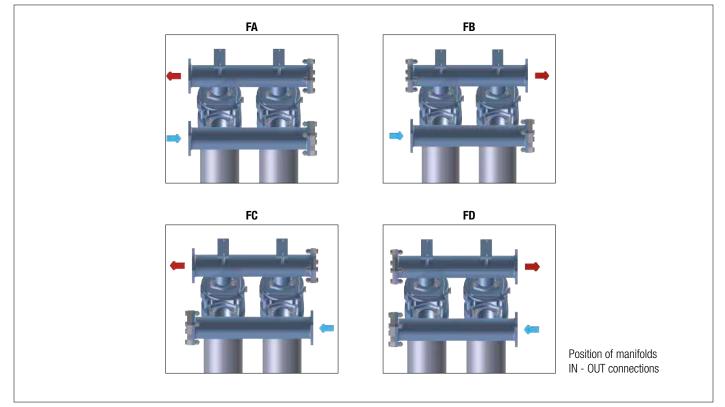
The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968. ∆p varies proportionally with density.



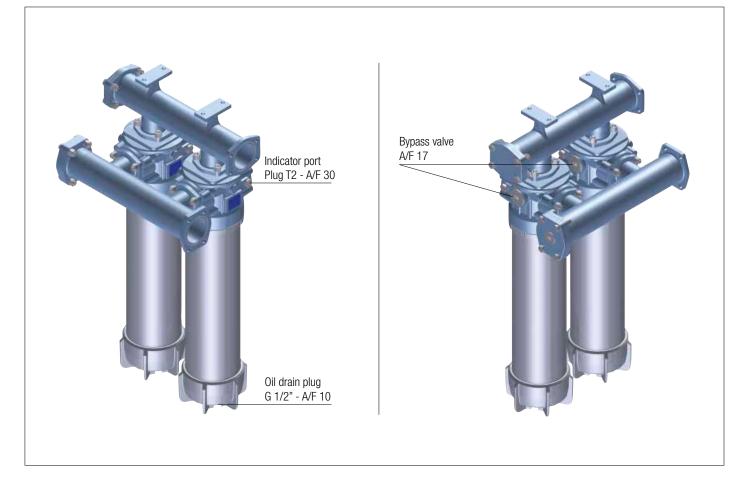
LMP 902-903 general information

Filter element according to DIN 24550

Manifolds



Focus on





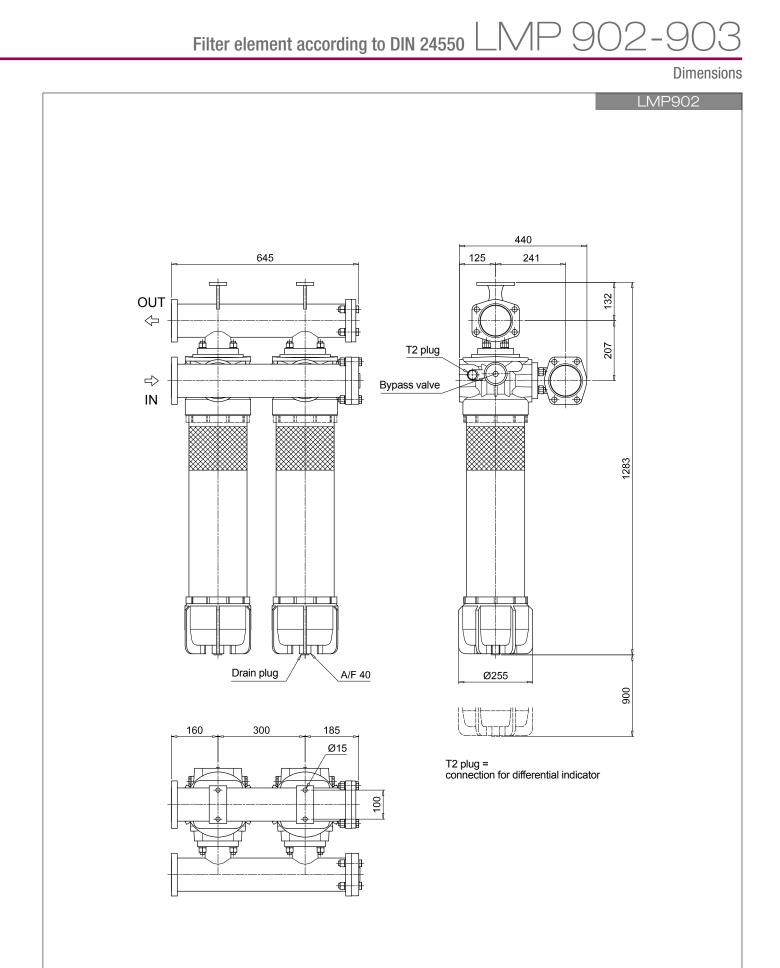
LMP 902-903 Filter element according to DIN 24550

Designation & Ordering code

	COMPL	ETE FILTER							
Series and size	Config	uration example: LMP902	2	В	Α	FA	A10	N	P01
LMP902 LMP903	_				\square				
Length									
2									
Bypass valve									
S Without bypass B 3.5 bar									
Seals and treatments									
A NBR									
V FPM									
Connections IN	OUT								
FA 4" SAE 3000 psi left	left								
FB 4" SAE 3000 psi left	right								
FC 4" SAE 3000 psi right	left								
FD 4" SAE 3000 psi right	right								
Filtration rating (filter media)									
A03 Inorganic microfiber 3 µm M25 Wire mesh 2	25 μm								
A06 Inorganic microfiber 6 µm M60 Wire mesh 6	60 µm								
A10 Inorganic microfiber 10 µm M90 Wire mesh 9)0 μm								
A16 Inorganic microfiber 16 µm			Element ∆p)		Ex	ecution		1
A25 Inorganic microfiber 25 μm		I	N 20 b	ar		P0		iltri stand	ard
WA025 Water absorber inorganic microfiber 25 µm						Px	x Cust	omized	

		FILTER	RELEMENT								
Element series and size				Configuration	example:	CU900	A10		4	Ν	P01
CU900											
Filter series and size											
LMP902 Nr. 4 filter elements											
LMP903 Nr. 6 filter elements											
Filtration rating (filter media)											
A03 Inorganic microfiber 3 µm	M25 Wire mesh 25 µm										
A06 Inorganic microfiber 6 µm	M60 Wire mesh 60 µm										
A10 Inorganic microfiber 10 µm	M90 Wire mesh 90 µm										
A16 Inorganic microfiber 16 µm											
A25 Inorganic microfiber 25 μm											
WA025 Water absorber inorganic r	nicrofiber 25 µm										
<u>_</u>	· _										
Seals A NBR											
V FPM					Г						
<u> </u>				Elen	nent ∆p		в	(ecui	tion		
				N	20 bar		PC			tri sta	ndard
							P>	X	Custo	nized	

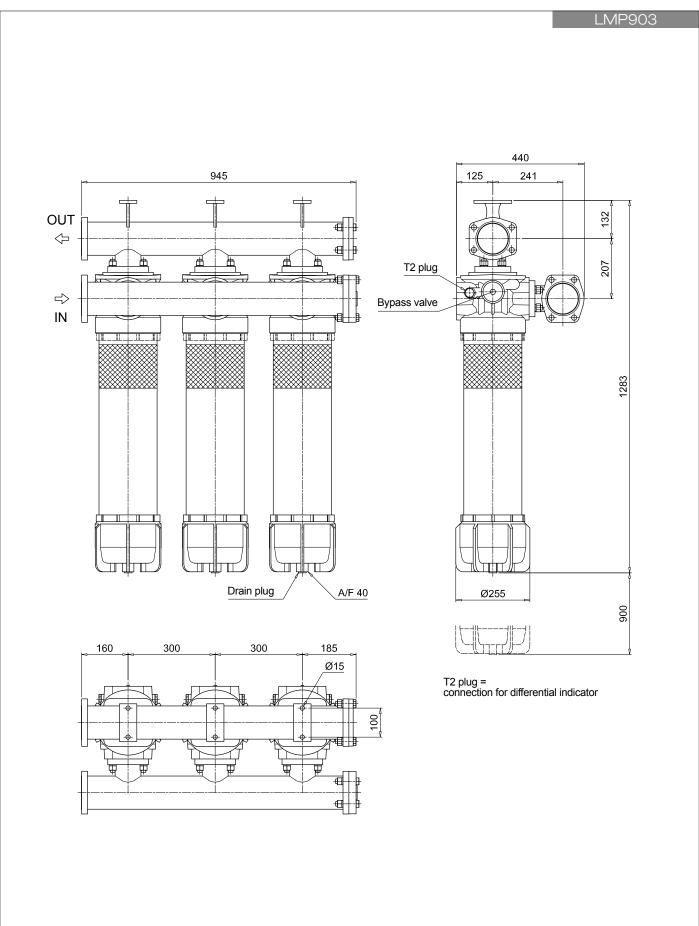
	ACCESSORIES										
Diffe	rential indicators	page			page						
DEA	Electrical differential indicator	445	DTA	Electronic differential indicator	448						
DEM	Electrical differential indicator	445-446	DVA	Visual differential indicator	448						
DLA	Electrical / visual differential indicator	446-447	DVM	Visual differential indicator	448						
DLE	Electrical / visual differential indicator	447									
Addi	tional features	page									
T2	Plug	449									





LMP902-903 Filter element according to DIN 24550

Dimensions



Low & Medium Pressure filters 442)

SPARE PARTS LMP 902-903

Order number for spare parts

